suturaque exceptis) fulvo-ochraceis, punctato-striatis, tricostatis; capite fere sicut in G. afzeli; thorace antice rectius angustato, medio dorso late sulcato. I ventre medio vitta maculari ochraceotomentoso.

Long. 17 millim. J Q.

PACHNODA MARGINATA, Drury, Ill. Ins. ii. p. 59, t. 32. f. 1; var. aurata, Voet, Col. i. t. i. f. 6.

5. Notes upon some Mammals recently discovered in Queensland. By CARL LUMHOLTZ, M.A. of the University of Christiania.

[Received June 3, 1884.]

During the three and a half years I travelled in Queensland I no doubt spent the most interesting part of my time in the ranges near Herbert River in North Queensland. By the kindness of Mr. W. Scott, I had my headquarters at Herbert Vale, a now deserted cattle-station on the Herbert River, at a very convenient distance from the ranges, to which I made excursions from this place, camping in the mountains in company with the blacks. Herbert Vale is, in a straight line, only about 15 miles from the coast. The nearest little town is Cardwell in Rockingham Bay. Herbert Vale is in 18° S. lat.; and the rainfall at Rockingham Bay is 90 inches.

The Great Dividing Range that runs along the east coast of the Australian continent, the Cordilleras of Australia, is in the southern part of Queensland low. In North Queensland it attains a greater elevation, in one spot even rising to a height of 5400 feet (Bellenden Kerr); and it is here, on account of the warm and moist climate, covered with fine tropical vegetation.

The range nearest the lower Herbert River, to the north of this, is between 2000 and 3000 feet high, and granitic. It is covered with dense shrubs; and numerous streams and rivulets hasten down the sides of the mountains to the bottom of the valley, often forming picturesque waterfalls. Here, in these extensive mountainous scrubs that commence near Herbert Vale, the new Marsupial mammals described by Dr. Robert Collett in his paper which was read at the last Meeting of this Society, are found. The scenery is very fine; but the character of the landscape is often wild, particularly near the crest of the mountains. It is difficult to penetrate into these regions. At one moment we find ourselves before steep precipices, the ground is rough and stony, but everywhere where there is the least possibility for any thing to take root, a variety of trees, often very large, have sprung up, while frequently creeping

and climbing plants spread themselves over the ground. Soon we come to a hilly and broken country, where the ground is more fertile; and here the vegetation is so dense that a man can only with the greatest difficulty work himself through it, torn to pieces by the so-called "lawyer palms" and stung by the nettles (Laportea moroides). The very troublesome "lawyer palms" are predominant in these mountainous scrubs, sometimes by their coils absolutely stopping the passage. But the variety of trees and plants otherwise is also very great. Those which near the top are most conspienous by their beauty are the tree-ferns, that spread their magnificent fronds over the rivulets. Further down are bananas abundant, together with various kinds of palms. After passing aeross the summit of this range, one finds oneself again in a forest country, the eastern tongues of Leichhardt's great basaltic tableland. At the commencement of this tableland there are still low hills and valleys covered with somewhat similar scrubs, but they are not so dense, because the "lawyer palms" are rarer here.

The country I explored in the ten months I spent near Herbert River stretches from the lower Herbert, containing the (low) ridges on both sides of the river; but principally that hilly land between the Herbert River and Cardwell, from Herbert Vale northwards about 6 miles above Herbert-River waterfall. None of the new manimals go south of Dalrymple gap. *Phalangista lemuroides* and *Dendrolagus lumholtzi* are not found in the range south of Herbert River (sea-view range); and it is also very doubtful whether *Phalangista archeri* and *P. herbertensis* are to be found there.

1. $\overline{P.\ archeri}$, ealled by the blacks Toollah (*suprà*, p. 381), is not uncommon in the upper part of these mountainous scrubs. It seems to be more commonly distributed than $P.\ herbertensis$ and $P.\ lemuroides$, though it never goes far down the mountains. Besides being, like the Phalangers, a night animal, it is in activity a great part of the day, as I have seen myself. The blacks kill it by climbing up the tree and throwing sticks at it, which often is very troublesome work. The animal is not very shy, but, when disturbed, it runs away quickly from tree to tree, so that a black man will sometimes have difficulty in killing it, if he has not got two or three of his comrades to meet it in different trees.

Phalanyista archeri is the principal prey of Dasyurus maculatus, which is plentiful in the same country.

2. Phalangista herbertensis (suprà, p. 383), called by the blacks Mongan, is only found on the very highest tops of the ranges.

3. Phalangista lemuroides (suprà, p. 385), called by the blacks Yabby, is not found in that part of the range that lies east of Gowry Creek. It makes its appearance first at the spur of mountains between Gowry Creek and Herbert River, and is pretty plentiful from there northwards. I shot the only two specimens I got in one of the tableland scrubs. It is killed by the blacks in the same way as *P. archeri*.

4. Dendrolagus lumholtzi (suprà, p. 387), called by the blacks

This animal lives on the highest parts of the moun-Boongary. tainous scrubs, preferring the densest parts of the scrubs and the most inaccessible places, where even the blacks have to be careful amongst the rocks and stones. It is fairly well distributed along the crest of the mountains west and north-west of Cardwell. How far north it goes I do not know; I should think it would be plentiful a long way north of Herbert River, at least as far as Cooktown. In the abovementioned patches of scrubs on the nearest tableland I found that the Boongary had once been plentiful, having left very numerous marks of their claws on the trees, but they had apparently been exterminated by the blacks, as the marks were old. Being of comparatively small extent and pretty easy to traverse, these scrubs offered the blacks an easy opportunity of getting their prey. The blacks told me that their old men had killed plenty of Boongary Possibly also the absence of Dendrolagus up here was here. partly due to migration. According to the blacks "Boongary plenty walks about;" and it is after my experience evident that these animals do move much about, mostly if they get disturbed. The blacks that followed me on my tours after Dendrolagus used always to say that Boongary was particularly active in moonlight. I believe that they also sometimes wander between these patches of scrubs on the tableland, having to pass over grass-lands. Once when we were travelling over to one of these scrubs, my blacks suddenly became excited and ran off after some animal that disappeared down a grassy hill. They soon found that they had made a mistake, but they all at first believed that it was a Boongary. This shows that the blacks are convinced that the animal is sometimes wandering in the grass-lands.

According to the blacks two or three are often found sleeping in the same tree. The Boongary is able to jump from a great height, and moves quickly on the ground. It seems to live only in one kind of tree. I have in any case only seen marks of its claws on one kind of tree, the name of which, I am sorry to say, I do not know. These trees are found very plentifully on the crest of the range, and grow often to a great height, always rather slender. In rainy weather the Boongary prefers the short, younger trees. It is often found at great distance from water, and the blacks used therefore to say that the Boongary never comes down to drink water. In the hot weather it is very much plagued by a large kind of horse-fly. The natives have told me that the Boongary often betrays its presence by the smack of its arms after the fly, which falls down dead. But it requires also the keen senses of a black to be able to notice this. At night it can also be heard, ascending the trees.

Although *Dendrolagus lumholtzi* is not uncommon in the mountainous scrubs, it is very difficult to find. First, because it likes the most inaccessible parts of these extensive scrubs, always near the top; secondly, because one cannot very well manage without the blacks, who however, besides being very treacherous, are a very lazy lot and are very difficult to induce to undertake such expeditions; finally,

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because a good Dingo¹ is necessarily required for the sport, which is a very difficult thing to get, as each tribe keeps only one or two tame Dingoes and these they will not easily part with. It cost me three months' work before I got my first specimen. The flesh of the Boongary is greatly appreciated by the natives. It is very palatable; but this animal, like a great many other Marsupials, is infested by a worm between the muscles and the skin, which of course makes the flesh less inviting. The natives never think of hunting the Boongary without the help of a Dingo trained for this kind of sport. In the morning, while the Dogs still can smell the tracks of the animals, they start for the Boongary chase. All the while they speak in a peculiar characteristic manner to the Dog, thus : Cha², Cha-Gangary pull-pulka-cha pull -Jingery dundun-Mormango-cha pull (here, here-smell Gangary-smell him-here smell, smell his feet-smart fellow-here smell). As soon as the Dog has found the tracks, it follows them, until it stops at the tree where the Boongary has gone up. One of the blacks climbs up the tree, and either seizes hold of the long tail of the animal with one hand, while with the other he smashes its head with a stick, or compels it to jump down, when it is killed by the Dingo.

June 17, 1884.

Prof. W. H. Flower, LL.D., F.R.S., President, in the Chair.

Mr. Henry Seebohm exhibited some skins of rare European and Asiatic birds, and made the following remarks :---

Tetrao griseiventris.—This is a new species of Hazel-Grouse from the forests of Tcherdyn between the sources of the Petchora and the Kama. It was described and figured as long ago as 1880 (Menzbier, Bull. Soc. Imp. Nat. Mosc. i. p. 105); and is an excellent species, nearly allied to the Common Hazel-Grouse, but perfectly distinct from it. Twenty or thirty examples have been obtained; but, so far as is known, none have ever found their way to England before.

Tetrao mlokoziewiczi.—This is another example of an isolated species, being nearly allied to, but perfectly distinct from, the Common Black Grouse. It breeds in the pine-regions of the Caucasus, straying up to the rhododendron-regions to feed.

Picus major pælzami.—This is the Caucasian form of the Great Spotted Woodpecker. The West-European form of this species is intermediate between the Caucasian form, with chocolate-coloured underparts, and the Arctic form, with snow-white underparts.

Haliaetus pelagicus.—This magnificent Eagle from Kamschatka is probably the largest Eagle known, and is remarkable for having 14 instead of 12 tail-feathers. Adult males with white shoulders are very rare in collections.

¹ These Dingoes are obtained by the natives when puppies, and are trained for Kangaroo and other hunting, but they seldom breed in confinement, and generally run away when they become old enough to breed.

² Cha cannot be translated literally.